## GLOSSINA ZIEMANNI, GRÜNBERG, A SYNONYM OF GLOSSINA PALPALIS SUB-SPECIES FUSCIPES. NEWSTEAD

BY

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In April, 1912, Dr. K. Grünberg\* described the tsetse-fly, *Glossina ziemanni*, which he considered distinguishable from all other known species by its uniformly dark colouration, its heavily infuscated wings and its entirely black tarsi. Furthermore, by the metallic sheen or iridescence of the scutellum and parts of the abdomen; and by the presence also of a dirty ashen grey pollinose covering. His description was based upon 1  $\circlearrowleft$  and 5  $\circlearrowleft$  (preserved in alcohol), which were taken at Mina, Mbam R., Cameroons, in 1912, and forwarded to Berlin by Dr. H. Ziemann.

Being desirous of examining examples of the species in question, I applied to Dr. G. Enderlein, of the Berlin Zoological Museum, for the loan of specimens of both sexes; this he very willingly granted, and at the same time forwarded the type  $\mathcal{S}$  and  $\mathcal{Q}$  to this School.

On making an examination of the external characters, one saw at once that the remarkable iridescent colouration, the 'pollinose' covering and the deep blackish brown tinge of the wings were clearly caused by impurities in the alcoholic preservative; these impurities had so completely masked the true colours and pattern that it was quite impossible to determine the species without making a microscopical examination of the armature.

Having dissected out the structures—a task of great difficulty owing to the intense hardening of the integument—one is now able to say, quite definitely, that the morphological characters are specifically identical with those of *Glossina palpalis* sub-species *fuscipes*, Newst.

<sup>\*</sup>Eine neue Tsetse-fliege aus Kamerun: Sitzgsber. Ges. Naturf. zu Berlin. Jahrg. 1912, No. 4, p. 246 (April, 1912).

One may add that the presence of foreign matter on the wings is easily demonstrable by passing a beam of light through the membrane, when almost the entire surface can be seen to be more or less covered by dark granular bodies which, in places, have blotted out the true character of the membrane and have also matted the fine hairs together in many parts.

One regrets exceedingly to have to relegate Dr. Grünberg's species to the synonymy of *Glossina palpalis* sub-species *fuscipes*, Newst., but the study of the taxonomic characters of his material affords convincing proof that *G. ziemanni* must sink.

We tender our sincere thanks to Dr. Enderlein for his great kindness and courteous assistance, without which it would have been quite impossible to clear up the synonymy.